

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original): A composition of functional additives useful for incorporating in water as a dip for the preservation of cut apple pieces comprising ascorbic acid and calcium ions, wherein the molar ratio between the ascorbic acid and the calcium ions is between about 2.8:1 to about 4.0:1.
2. (Original): A composition according to claim 1 wherein the molar ratio is between about 2.8:1 to about 3.5:1.
3. (Original): A composition according to claim 1, wherein the composition further comprises magnesium ions, and the weight ratio between the calcium ions and magnesium ions is between about 5.4:1 and about 11.3:1.
4. (Original): A composition according to claim 3, wherein magnesium ions are derived from magnesium chloride hexahydrate or anhydrous magnesium chloride.
5. (Currently amended): A composition according to claim 1, wherein the calcium ions are derived from one or more of the group consisting essentially of calcium chloride dihydrate, calcium hydroxide and calcium carbonate.
6. (Original): A composition according to claim 1 wherein the calcium ions are derived from calcium chloride dihydrate.
7. (Original): A composition according to claim 1 wherein the calcium ions are derived from calcium hydroxide.
8. (Original): A composition according to claim 1 wherein the calcium ions are derived from calcium carbonate.
9. (Original): A composition according to claim 1 wherein the calcium ions are derived from calcium chloride dihydrate, calcium hydroxide and calcium carbonate.

10. (Original): A composition according to claim 1 including sodium citrate or citric acid as a pH adjuster.

11. (Original): A solution of functional additives useful for the preservation of cut apple pieces comprising:

- a. ascorbic acid having a concentration between about 5.0% and 9% (w/w); and
- b. calcium ions having a concentration between about 0.4% and 0.68% (w/w);
- c. water;

wherein the molar ratio between ascorbic acid and the calcium ions is between about 2.8:1 and 4.0:1.

12. (Original): A solution according to claim 11 wherein the molar ratio between ascorbic acid and calcium ions is between about 2.8:1 and 3.5:1.

13. (Original): A solution according to claim 11 wherein the solution further comprises magnesium ions having a concentration between 0.06% and 0.10% (w/w).

14. (Original): A solution according to claim 13 wherein the magnesium ions are derived from magnesium chloride hexahydrate or anhydrous magnesium chloride.

15. (Currently amended): A solution according to claim 11 wherein the calcium ions are derived from one or more of the group consisting essentially of calcium chloride dihydrate, calcium hydroxide and calcium carbonate.

16. (Original): A solution according to claim 11 wherein the calcium ions are derived from calcium chloride dihydrate.

17. (Original): A solution according to claim 11 wherein the calcium ions are derived from calcium hydroxide.

18. (Original): A solution according to claim 11 wherein the calcium ions are derived from calcium carbonate.

19. (Original): A solution according to claim 11 wherein the calcium ions are derived from calcium chloride dihydrate, calcium hydroxide and calcium carbonate.
20. (Original): A solution according to claim 11 wherein the pH is adjusted with citric acid or sodium citrate.
21. (Original): A solution of functional additives useful for the preservation of cut apple pieces comprising water and about 5.6% to 9% (w/w) ascorbic acid, about 0.3% to 1% (w/w) calcium chloride dihydrate, and about 0.06% to 0.5% (w/w) calcium hydroxide dissolved in the water, the solution having a pH of 3.5 to 4.5.
22. (Original): A solution according to claim 21 further including about 0.5% to 1.0% (w/w) calcium carbonate.
23. (Original): A solution according to claim 21 including about 0.5% (w/w) magnesium chloride.
24. (Original): A solution according to claim 21, wherein the pH is adjusted with citric acid or sodium citrate.
25. (Withdrawn): A method of preserving fresh cut apples comprising:
- a. washing whole fresh apples in a sanitizing solution;
 - b. coring and cutting the apples into pieces;
 - c. immersing the apple pieces in a solution made from the composition according to claim 1 for a period of time sufficient to transfer the functional additives in the composition to the apple pieces.
 - d. removing excess solution from the apple pieces;
 - e. packaging the cut apple pieces into containers; and
 - f. quick-chilling the treated cut apple pieces in the sealed containers at temperatures of 0 to 4°C for at least 24 hours.

26. (Withdrawn): A method of preserving fresh cut apples comprising:
- a. washing whole fresh apples in a sanitizing solution;
 - b. coring and cutting the apples into pieces;
 - c. immersing the apple pieces in the solution according to claim 11 for a period of time sufficient to transfer the functional additives in the solution to the apple pieces;
 - d. removing excess solution from the apple pieces;
 - e. packaging the cut apple pieces into containers; and
 - f. quick-chilling the treated cut apple pieces in the sealed containers at temperatures of 0 to 4°C for at least 24 hours.
27. (Withdrawn): A method according to claim 26 wherein the apple pieces are immersed in the solution for a period of 2 to 3 minutes.
28. (Withdrawn): A method according to claim 26 wherein packaging the apple pieces into containers comprises packaging the apple pieces into plastic containers having gas permeabilities of 100 to 180 cm³ of oxygen per 100 inches² per 24 hours at 25°C at 1 atmosphere and 400 to 1000 cm³ of carbon dioxide per 100 inches² per 24 hours at 25°C at 1 atmosphere.
29. (Withdrawn): A method according to claim 26 wherein the apple pieces are packaged into containers with a headspace.
30. (Withdrawn): A method according to claim 29 wherein packaging the apple pieces into containers comprises providing a volume ratio between 0.2:1 and 2:1 between the headspace and the apple pieces.
31. (Withdrawn): A method according to claim 26 wherein packaging the apple pieces into containers comprises packaging the apple pieces into containers filled with air.
32. (Withdrawn): A method according to claim 26 wherein packaging the apple pieces into containers comprises packaging the apple pieces into containers flushed with gas having a

mixture of 15% O² (vol), 5% CO² (vol), and 80% N² (vol).